

WHAT IS CLAIMED IS:

1. An optical pickup device comprising:
an objective lens for condensing a light beam
on an optical disk;
5 a lens holding body for holding the objective
lens;
a support body for supporting the lens holding
body so as to allow the lens holding body to move in
at least one of a focusing direction and a tracking
10 direction of the objective lens; and
an optical base which is capable of moving in a
radial direction of the optical disk and which holds
the support body so as to allow the support body to
rotate around a rotation axis perpendicular to the
15 focusing direction and the tracking direction.
2. An optical pickup device according to Claim
1, wherein the support body is rotatably supported by
at least two support points on an upper surface of
20 the optical base on an optical disk side.
3. An optical pickup device according to Claim
2, wherein the support body is supported by the
optical base such that the lens holding body is
25 situated inside the optical base.
4. An optical pickup device according to Claim

2, wherein the objective lens is arranged on the rotation axis connecting the support points or in the vicinity of the rotation axis.

5 5. An optical pickup device according to Claim
1, further comprising a mirror provided on the
optical base and adapted to reflect light, which is
emitted in parallel to the optical disk from a light
10 disk, wherein the support points are arranged such
that the rotation axis connecting the support points
is situated between an optical path extending from
the light source to the mirror and a lower surface of
a cartridge housing the optical disk.

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6. An optical pickup device according to Claim
1, wherein the lens holding body has a coil firmly
attached thereto for moving the objective lens in at
least one of the focusing direction and the tracking
20 direction, and wherein the support body has a magnet
fixed thereto for applying a magnetic field to the
coil.

7. An optical pickup device according to Claim
25 6, wherein the support body is composed of a support
member for supporting the lens holding body so as to
allow the lens holding body to move in at least one

of the focusing direction and the tracking direction of the objective lens; and a base member fixedly supporting the support member and the magnet.

5 8. An optical pickup device according to Claim 7, wherein at least a part of the base is constituted of a yoke forming a magnetic circuit together with the magnet.

10 9. An optical pickup device according to Claim 1, wherein the optical base is mounted with a motor and a drive member which is in contact with the support body and which converts a torque of the motor to a driving force for vertically moving a part of
15 the support body, the support body being rotated around the rotation axis by vertically moving the part of the support body.

 10. An optical pickup device according to Claim
20 9, wherein the motor is arranged such that its rotation shaft is parallel to a radial direction of the optical disk, and wherein the drive member is arranged in a direction perpendicular to the radial direction of the optical disk.

25 11. An optical pickup device according to Claim 10, wherein the drive member is arranged on a side .

portion of the optical base.

12. An optical pickup device according to Claim
9, wherein the drive member converts the torque of
5 the motor to a reciprocating motion in a tangential
direction of the optical disk, and wherein the drive
member has at an end thereof an inclined portion for
converting the reciprocating motion to a vertical
motion, with the inclined portion being in contact
10 with the part of the support body.

13. An optical pickup device according to Claim
9, wherein a first gear is provided at a forward end
of the rotation shaft of the motor, and wherein the
15 drive member has at one end a second gear connected
to the first gear and at the other end an eccentric
cam in contact with the one end of the support member,
with the eccentric cam being in contact with the part
of the support body.

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14. An optical pickup device according to Claim
1, wherein at least one of the support points allows
height adjustment in an optical axis direction of the
objective lens.

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15. An optical disk recording-reproducing
apparatus equipped with an optical pickup device
according to Claim 1.